

INTRODUCING YOG TO MEDICAL STUDENTS: THE JIPMER EXPERIENCE

Dr. MADANMOHAN, MD, PGDY, FIAY, MSc (Yoga), DSc
Professor and Head, Department of Physiology, and Programme Director, ACYTER,
JIPMER, Puducherry – 605 006

INTRODUCTION

Modern man is the victim of all-pervading stress. Yog is the best means for managing this stress of our daily life. Medical students have to face overloaded curriculum and frequent examinations after a sudden change in the study environment. Regular practice of yog will improve their psychosomatic health and enable them to face the situation.

The holistic science of yog has a great future as it has the potential to prevent as well as manage a number of stress-induced chronic diseases that defy allopathic medicine. A holistic physician who is a practitioner of yog will be able to render better medicare to the masses and will be a boon to the society.

I have given yog training to many batches of medical students, school children, police personnel and hospital patients with the aim of determining the effectiveness of yog as a health-promoting and therapeutic intervention. The results have been gratifying and many papers have been published in indexed journals. It was my heart's desire to introduce yog to medical students as a branch of physiology and contemporary medicine. The opportunity came with financial support from Morarji Desai National Institute of Yoga, New Delhi. With the aim of motivating 30 students to join the initial programme, I took introductory lecture for the MBBS batch of 2008. However, after the introductory lecture, many students wanted to join and I enlisted the entire batch (n=100) for the programme. The objectives of the programme were:

1. To promote awareness among medical students about the effectiveness of yog as an inexpensive means for achieving holistic health.
2. To impart knowledge, skill & attitude about the theoretical & practical aspects of yogic science.
3. To motivate medical students to take up further studies, therapy & research in yog.
4. To introduce yog in medical curriculum as a branch of physiology & contemporary medicine.

DESIGN OF THE YOG PROGRAMME

I designed a 60 hour programme that included i) lectures (12 h), ii) lecture-demonstrations (3 h) iii) practice sessions (36 h) iv) students seminar on yog therapy modules (6 h) and v) pre-test, post-test, administration of questionnaires to students and programme evaluation by the students (3 h). The list of lecture topics, yog therapy modules and the schedule for practice sessions follows.

Lecture topics included:

1. Introductory lecture
2. What is yog?
3. Healthy lifestyle: a yogic perspective
4. Effect of yog training on physiological functions
5. Dhyān and its psycho-physiological correlates
6. Pranayam and its physiological benefits
7. Stress and its management: a yogic perspective
8. Spiritual health and healing: a yogic perspective
9. Diet for health and healing: a yogic perspective
10. Therapeutic potential of yog
11. Benefits of yog practices
12. Traditional basis of yog

Yog therapy modules included:

1. Anxiety
2. Hypertension
3. Diabetes mellitus
4. Bronchial asthma
5. Obesity
6. Arthritis
7. GI disorders
8. Menstrual disorders

DAILY PRACTICE SCHEDULE FOR YOG CLASS

Prayer AUM chant Asans: 1. Pavanmuktasan 2. Navasan 3. Naukasan 4. Makarasan 5. Bhujangasan 6. Shalabhasan 7. Dhanurasan 8. Yog mudra 9. Ardh-matsyendrasan	10. Pashchimottanasan 11. Talasan 12. Trikonasan 13. Hast-utthanasan & padahastasan 14. Ardhalasana 15. Viparitarani 16. Sarvangasan 17. Matsyasan 18. Vrikshasan 19. Shavasan	Pranayams: 1. Bhastrika 2. Kapalabhati 3. Nadi shuddhi 4. Savitri 5. Pranav (AUM) Meditation Suryanamaskar
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PROGRAMME EVALUATION & STUDENTS' FEED BACK

The preliminary task of priming medical undergraduates in yog was welcomed with unexpected enthusiasm & co-operation by the students. The following are the statements of the students' feedback and programme evaluation. There was an appreciable improvement in the students' knowledge base regarding the ancient science of yog, the increase being 30% (Fig.1). In the absence of physical disease or infirmity the level of well being is largely and essentially determined by the psychological state.

Standard, appropriate and time tested questionnaires currently employed in clinical practice were chosen to study the psychological well being of the participants. There was an observable increase of the same, reflecting realistic values, though the improvement was not extraordinary (Fig. 2). Figure 3 gives specific improvements in different aspects of psychological well being. There was a commendable improvement in the number of students reporting a positive well being at the end of the programme (Fig. 4).

Maintenance of dynamic homeostasis is not possible in the absence of reliable feed back systems. Constant commitment and continuous refinement with the help of feedback systems results in strong, efficient and fruitful programmes. Keeping this in mind, we gave due emphasis to student feedback to improve the reach of this programme to the target population.

Figures 5 to 23 reflect the student feedback & evaluation responses for various aspects of the training programme. Every question (Fig. 5, 6, 7, 8, 9) had a due choice of extreme poverty for two reasons. One is to look out for any hidden inconvenience or problem, and second reason is to reflect the genuineness in the conduct of the questionnaire.

Mixed responses were received from students regarding the recommendation of yog in UG medical curriculum (Fig. 9). The underlying reason is tight teaching schedule and loaded curriculum in a medical school (Fig. 22). Due to frequent internal assessments and other examinations, students are not sure of recommending yog in medical curriculum. Although a majority of students recommend yog in curriculum to help them withstand this hectic curriculum, a word of caution from them is not to impose lengthy and frequent theory classes that will be an additional burden in the already over-loaded MBBS curriculum.

Clarity, realism of objectives and presentation of relevant topics to fulfill the objectives of the course were almost fully achieved (Fig. 10, 11, 12, 14). Students were satisfied with the manner the course was conducted, i.e. encouraging active participation and opportunity for critical questions. (Fig 16, 17). This again re-emphasizes our due importance given to student feedback & comments.

Facilitating & hindering factors (Fig. 21, 22) were taken note of and the same will be given due consideration in the next session as action of refinement.

Finally, students' suggestions to improve the course were analysed. Figures 21, 22, 23 were given as open type questions and every single response was carefully analysed, categorized and presented for the use of future planning and improvement of the course.

We had made it amply clear to the students that the feedback must be absolutely honest and realistic. Keeping this in mind, I kept away from administering & analyzing the feedback and the work was done by my juniors.

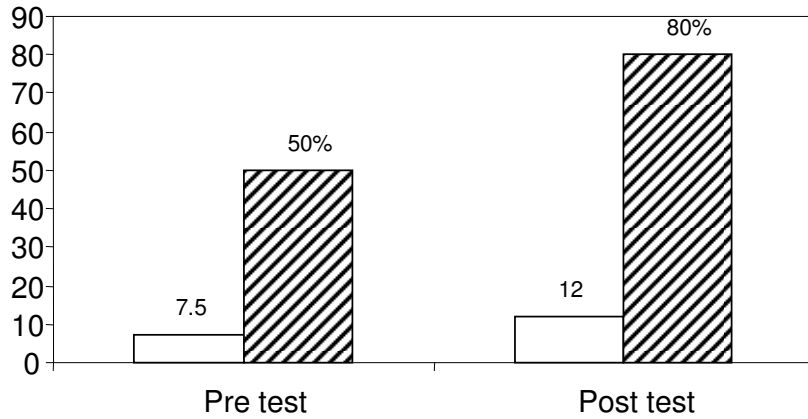


Fig.1: Pre and post training evaluation of students.
Open bars: marks out of 15; hatched bars: % marks

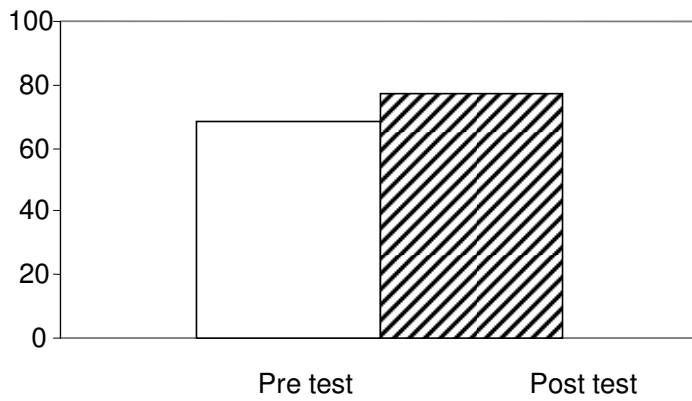


Fig.2: Psychological general well-being. Pre and post training mean scores.
Open bars: before training; hatched bars: after training

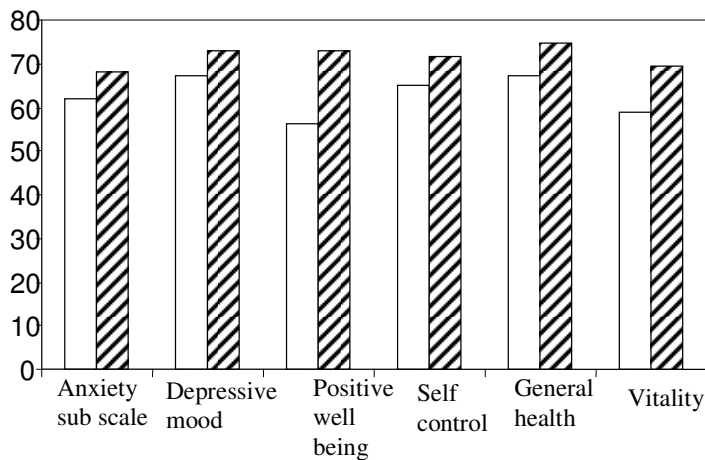


Fig.3: Psychological general well-being. Pre and post training sub scores.
Open bars: before training; hatched bars: after training

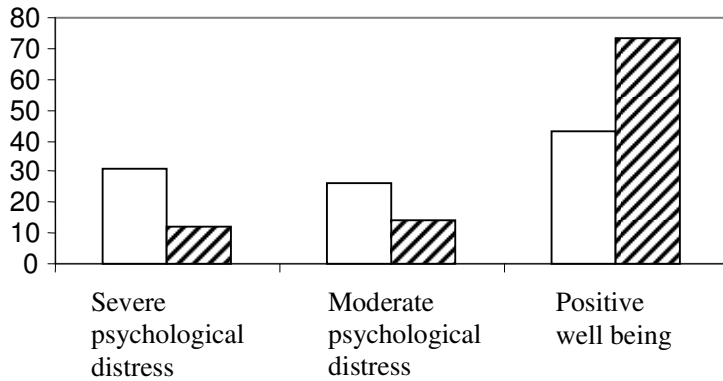


Fig.4: Percentage of subjects in each category of psychological well-being.
Open bars: before training; hatched bars: after training

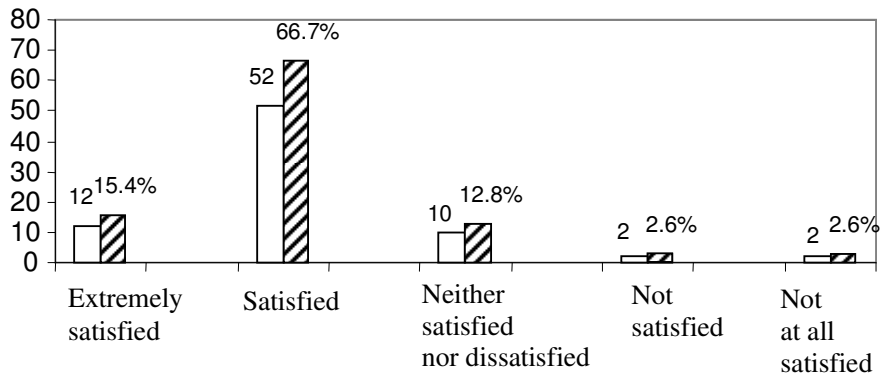


Fig.5: Overall level of satisfaction with the course
Open bars: number of responses; hatched bars: % of responses

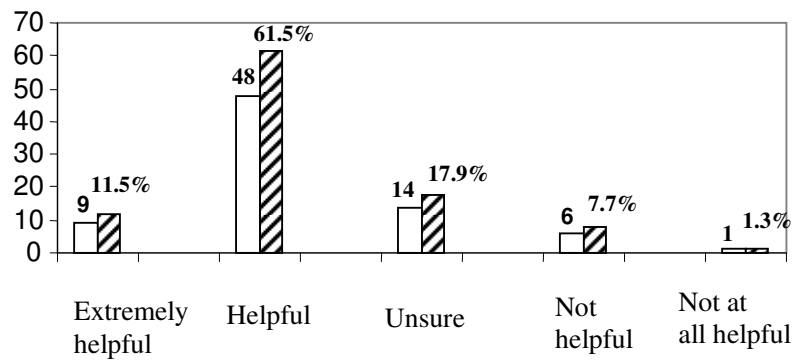


Fig.6: How helpful were the lectures?
Open bars: number of responses; hatched bars: % of responses

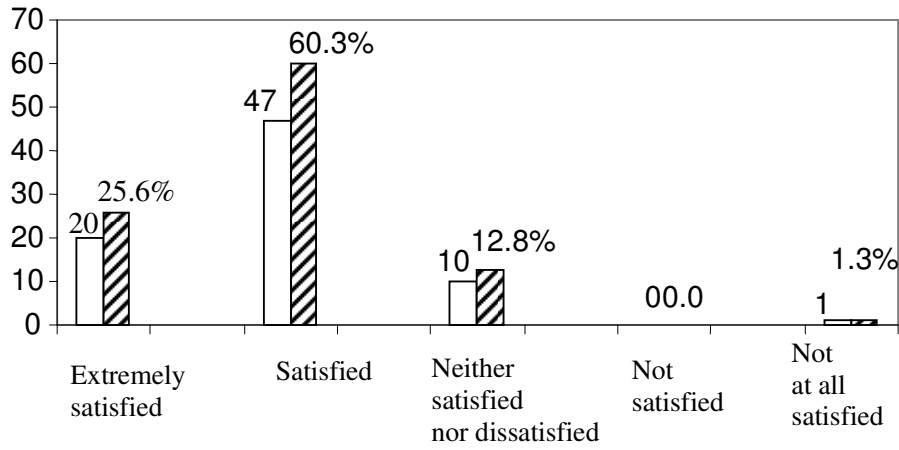


Fig.7: How satisfied are you with your practice sessions?
 Open bars: number of responses; hatched bars: % of responses

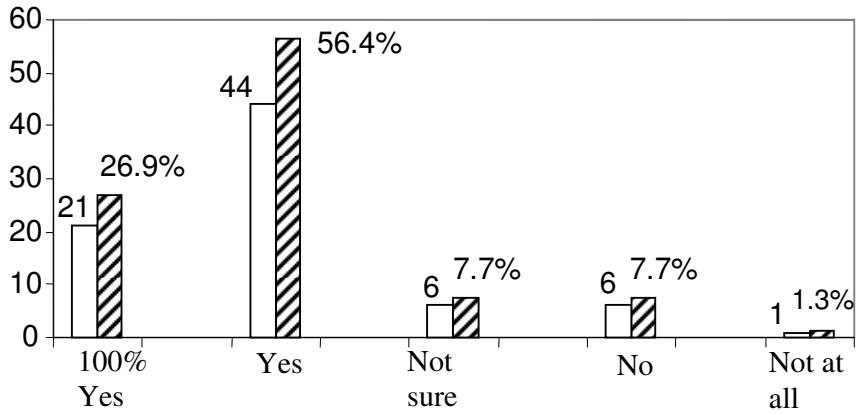


Fig.8: Would you recommend this course to your colleagues?
 Open bars: number of responses; hatched bars: % of responses

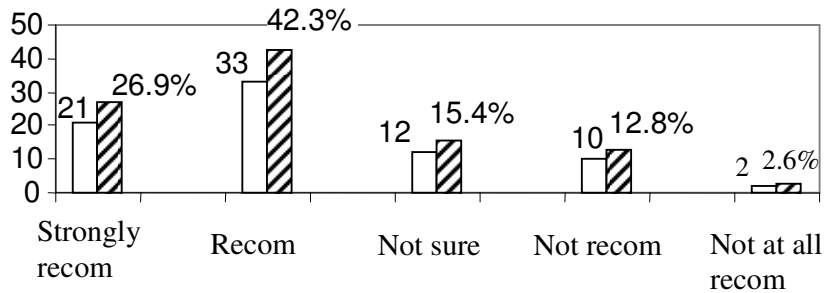


Fig.9: Do you recommend the inclusion of this course in the UG medical curriculum?
 Open bars: number of responses; hatched bars: % of responses

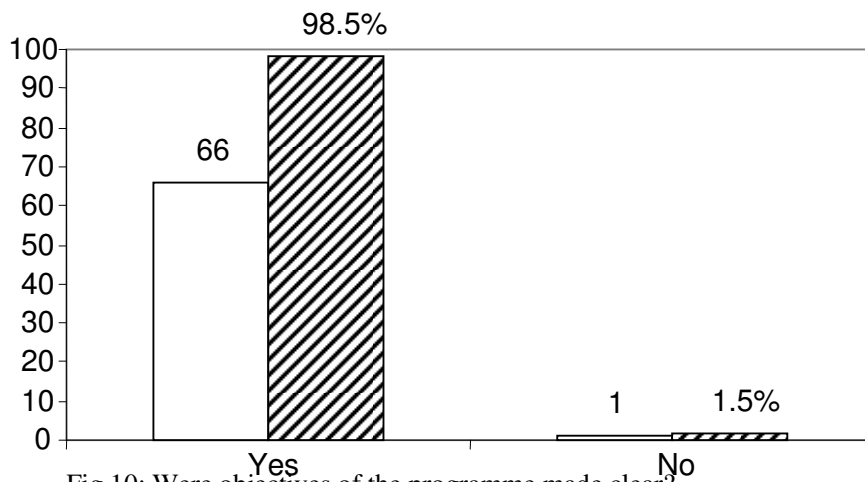


Fig.10: Were objectives of the programme made clear?
 Open bars: number of responses; hatched bars: % of responses

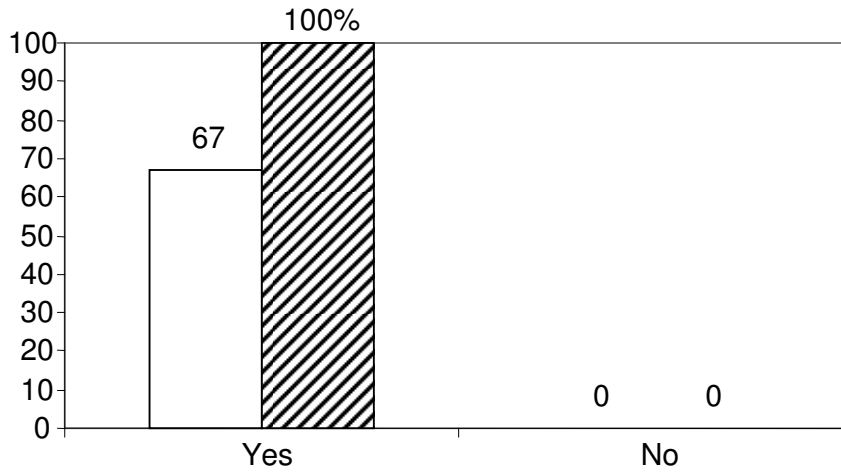


Fig.11: Were objectives of the course realistic?
 Open bars: number of responses; hatched bars: % of responses

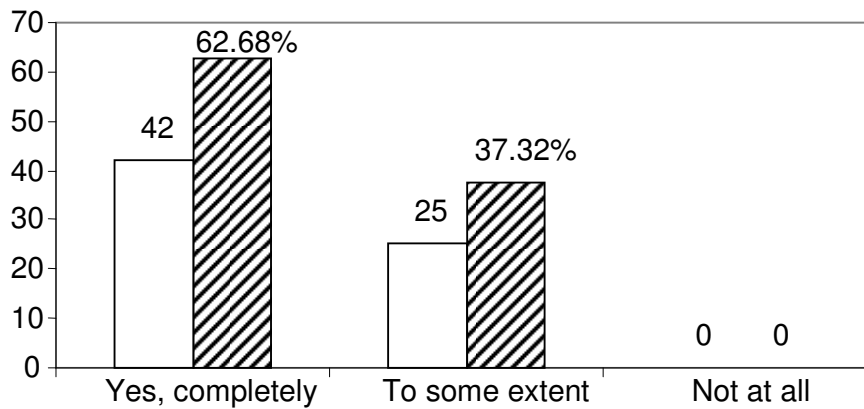


Fig.12: Were the topics presented relevant to the objectives of the course?
 Open bars: number of responses; hatched bars: % of responses

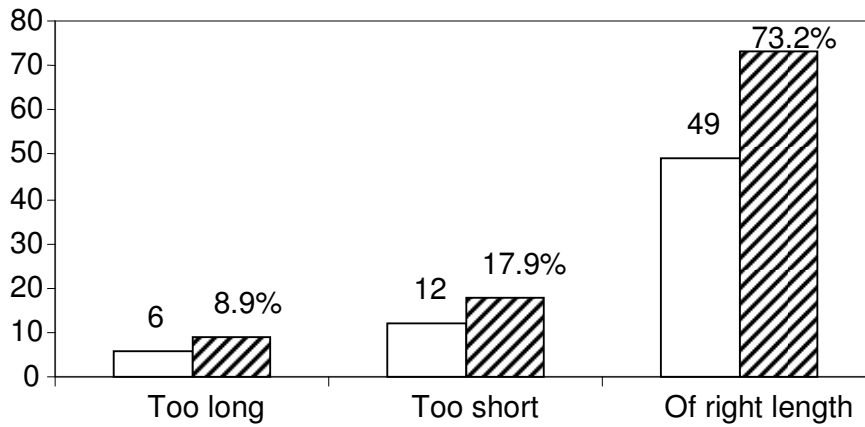


Fig.13: What do you consider regarding the duration of the course?
 Open bars: number of responses; hatched bars: % of responses

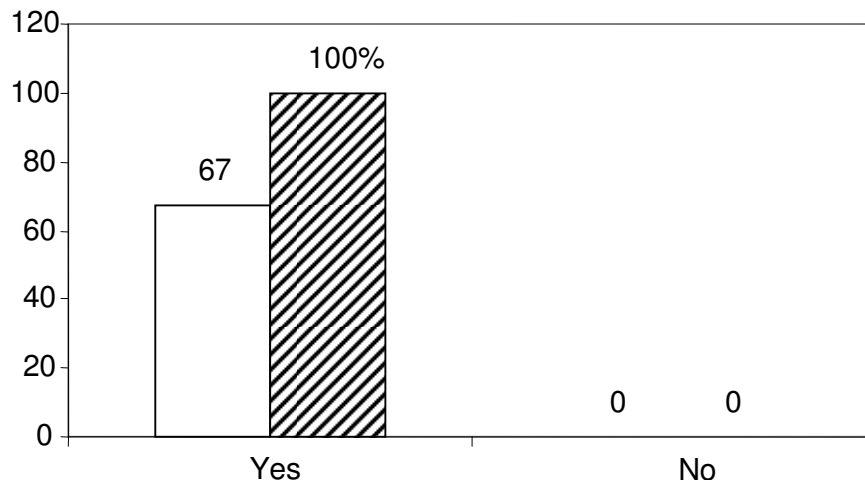


Fig.14: Was the resource material / handouts helpful to you?
 Open bars: number of responses; hatched bars: % of responses

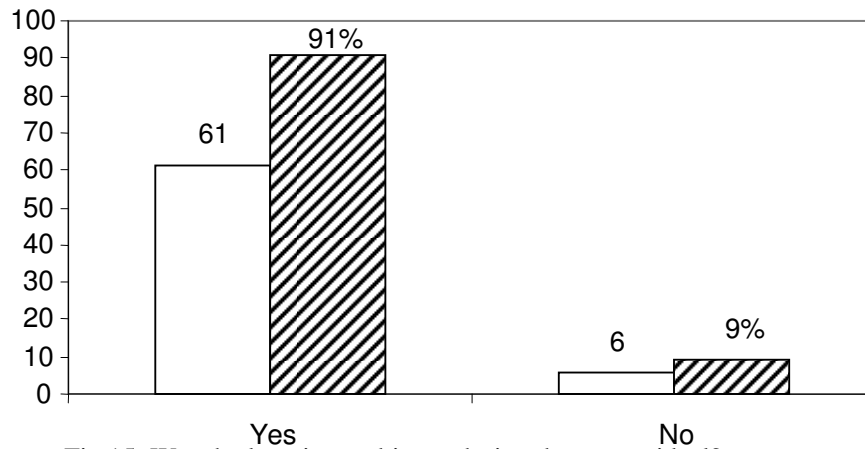


Fig.15: Was the learning ambience during the course ideal?
 Open bars: number of responses; hatched bars: % of responses

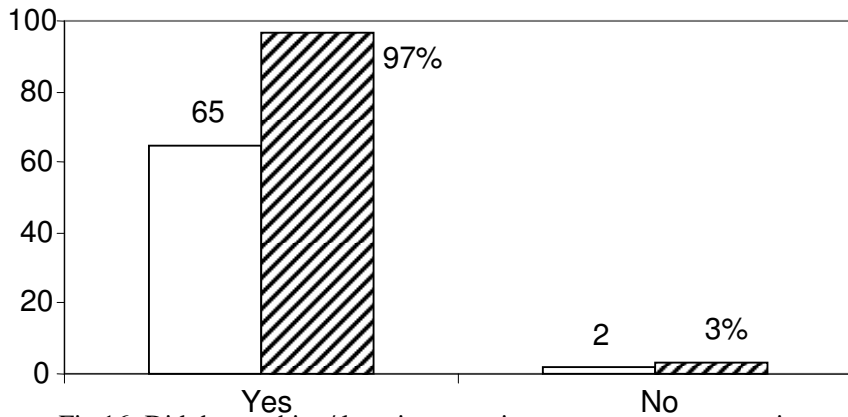


Fig.16: Did the teaching/ learning experience encourage your active participation?
 Open bars: number of responses; hatched bars: % of responses

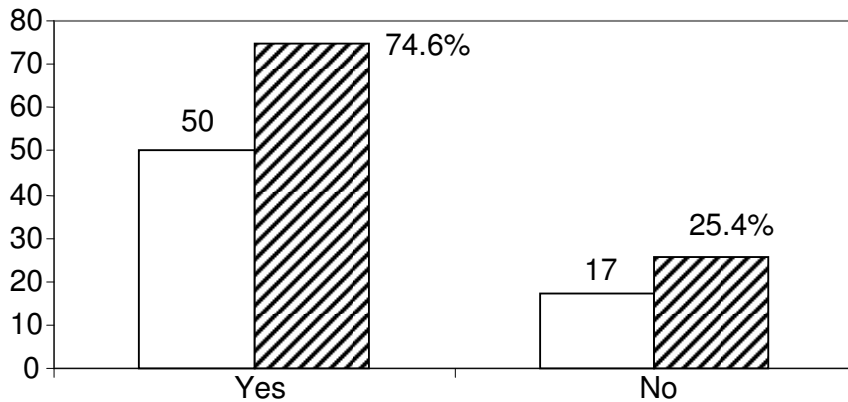


Fig.17: Did you get enough opportunities for critical comments?
 Open bars: number of responses; hatched bars: % of responses

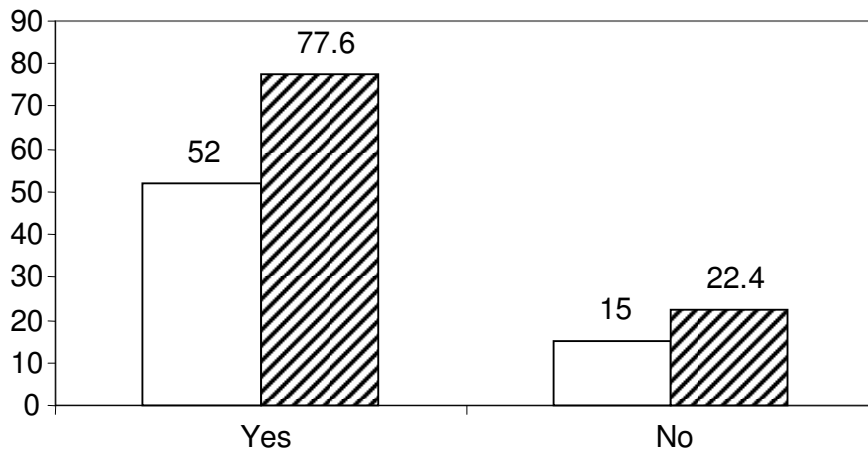


Fig.18: Did the course add to your theoretical knowledge?
 Open bars: number of responses; hatched bars: % of responses

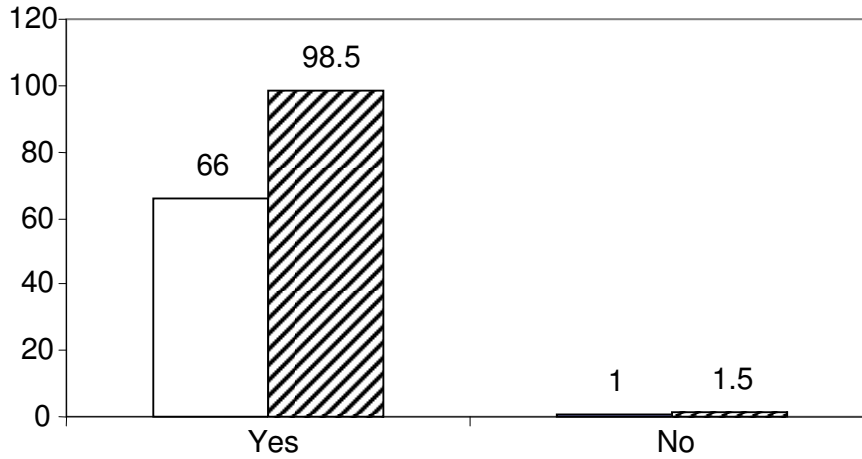


Fig.19: Did the course add to your practical knowledge?
Open bars: number of responses; hatched bars: % of responses

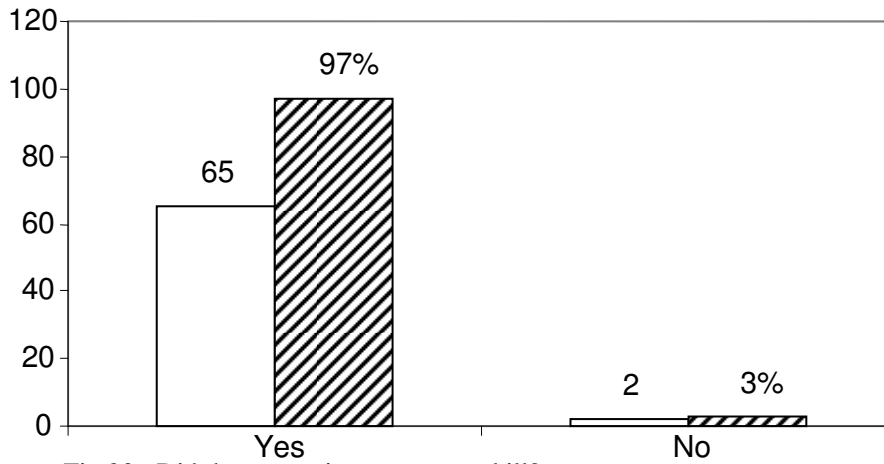


Fig.20: Did the course improve your skill?
Open bars: number of responses; hatched bars: % of responses

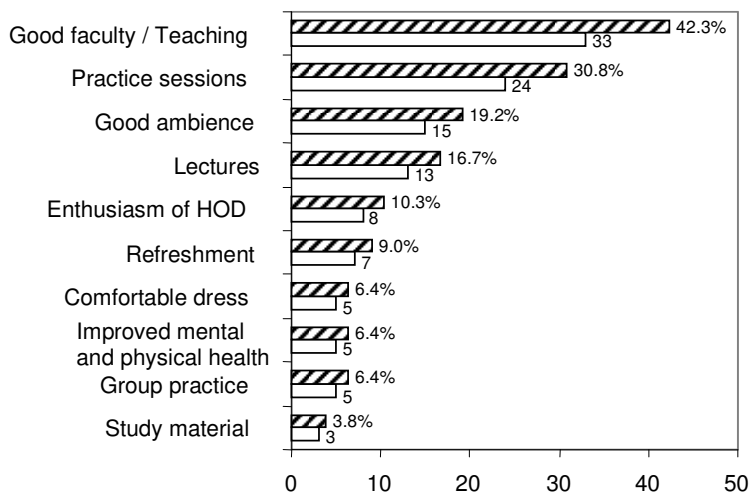


Fig.21: Factors that facilitated learning
Open bars: number of responses; hatched bars: % of responses

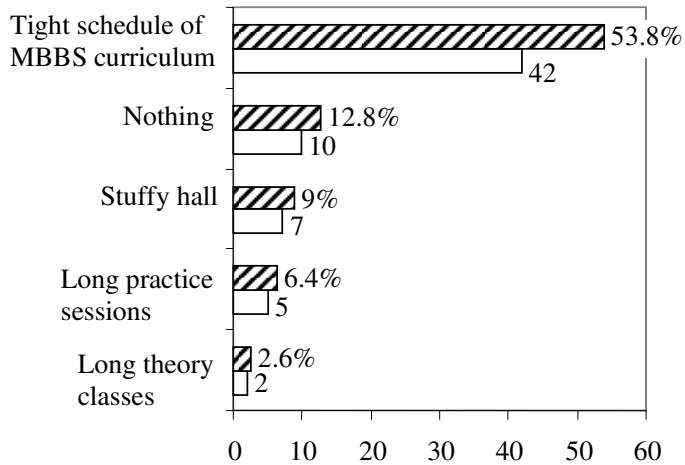


Fig.22: Factors that hindered learning
 Open bars: number of responses; hatched bars: % of responses

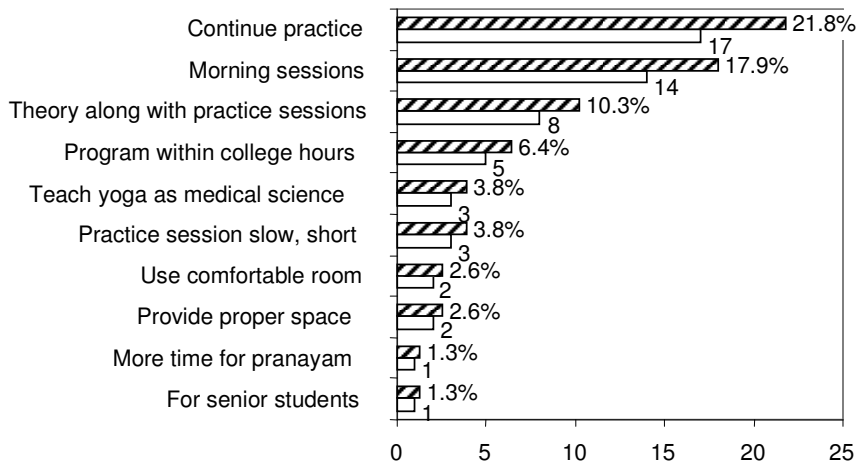


Fig.23: Suggestions from the participants for improvement of the course
 Open bars: number of responses; hatched bars: % of responses

CONCLUSION AND SUGGESTIONS

The programme had an overwhelming response with excellent co-operation from the medical undergraduates. In light of the keen interest shown by the organizers and encouraging student feedback, the following are the suggestions:

1. Yog should be made an integral part of medical curriculum, as a branch of physiology and contemporary medicine. Complementary and alternative health systems are already being taught in many standard modern medical schools in different parts of the world. Yog has a stronger scientific and philosophical basis.
2. The ideal time in an undergraduate medical programme where yog can be incorporated is during the first semester and again during the sixth and / seventh semesters. The former will help them in combating and adapting to the totally new and extremely stressful first year undergraduate medical curriculum. The latter will help in better understanding of the science of yog and its applications in clinical practice. This will also enable them to shape themselves as holistic physicians and help them in their personal development as well as to become more efficient physicians.
3. The present programme was constrained by lack of a space with proper ambience and comfort, which is very essential for the yog training. It is suggested that there should be a space fully furnished, having the right ambience and comfort that will facilitate the teaching and practice of yog. The space should be exclusively devoted to the yog training programme.
4. From the students' standpoint, practice sessions with integrated theory, morning practice sessions and training schedule within college hours are among the major recommendations. Students also wanted a facility to continue yog practice on a regular basis even after the completion of the introductory programme.

ACKNOWLEDGEMENTS

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